

For Research Use Only

# GAD1 Monoclonal antibody

Catalog Number: 67648-1-Ig 4 Publications



## Basic Information

Catalog Number: 67648-1-Ig	GenBank Accession Number: BC002815	Purification Method: Protein A purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 2571	CloneNo.: 2D5B7
Source: Mouse	UNIPROT ID: Q99259	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF-P 1:200-1:800
Isotype: IgG2a	Full Name: glutamate decarboxylase 1 (brain, 67kDa)	
Immunogen Catalog Number: AG21336	Calculated MW: 67 kDa	
	Observed MW: 67 kDa, 57 kDa	

## Applications

Tested Applications: WB, IHC, IF-P, ELISA	Positive Controls:
Cited Applications: WB, IF	WB : pig brain tissue, rat brain tissue, mouse cerebellum tissue, pig cerebellum tissue, rabbit brain tissue, rabbit cerebellum tissue, rat cerebellum tissue, mouse brain tissue
Species Specificity: Human, mouse, rat, pig, rabbit	IHC : rat cerebellum tissue, mouse cerebellum tissue
Cited Species: human, mouse	IF-P : rat brain tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

GAD1, also named as GAD67, belongs to the group II decarboxylase family. GAD1 is the rate-limiting enzyme responsible for  $\gamma$ -aminobutyric acid (GABA) biosynthesis from glutamatic acid and the major GAD isoform in the human brain for early brain development (PMID:21302352). It is also potentially involved in variety of skin activities.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mengjie Qi	39480623	Biol Trace Elem Res	WB
Rong-Xin Song	38513970	Exp Neurol	IF
Yanbing Kao	38201271	Cells	IF, WB

## Storage

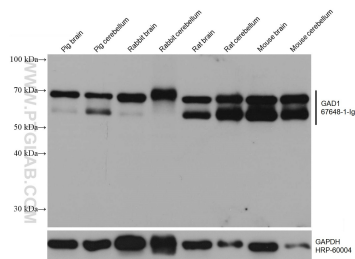
Storage:  
Store at -20°C. Stable for one year after shipment.  
Storage Buffer:  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

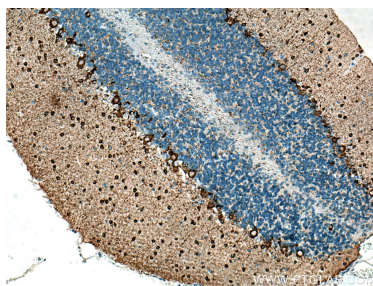
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

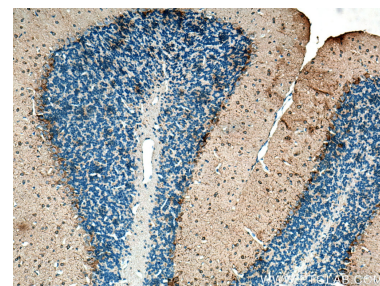
## Selected Validation Data



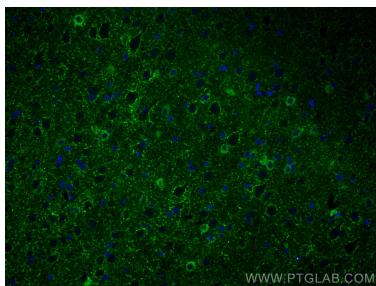
Various lysates were subjected to SDS PAGE followed by western blot with 67648-1-Ig (GAD1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue slide using 67648-1-Ig (GAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 67648-1-Ig (GAD1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using GAD1 antibody (67648-1-Ig, Clone: 2D5B7) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).